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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,526	01/23/2004	George P. Copeland	13768.471	9211
47973 7590 06/19/2009 WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111				
EXAMINER				
WONG, JOSEPH D				
ART UNIT		PAPER NUMBER		
2166				
MAIL DATE		DELIVERY MODE		
06/19/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,526

Applicant(s)

COPELAND ET AL.

Examiner

JOSEPH D. WONG

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9 Mar 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 April 2009 has been entered.

Response to Arguments

Rejection under 35 U.S.C. §102

Arguments are moot in view of new grounds of rejection as necessitated by the instant claim amendment.

Rejection under U.S.C. §103

Arguments are moot in view of new grounds of rejection as necessitated by the instant claim amendment.

For at least the reasons above, all pending claims stand rejected.

Drawings

Fig. 1 is objected to because the arrow connector element between item 120 and item 112 is not numbered or labeled. Appropriate correction is required.

Fig. 2 is objected because item 200 has three arrows which appears informal.

Likewise Fig. 4, item 400 appears informal.

Fig. 6, reference numeral item 600 appears informal.

Fig. 7, reference numeral item 700 appears informal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11, 14-16, 21-28, 30-34, 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesh et al., US Patent 6,295,610 B1, Filed 17 September 1998, Patent Date 25 September 2001, hereinafter Ganesh in view of Brown et al., "Undo for Operators: Building an Undoable E-mail Store", hereinafter Brown.

Regarding claim 1, Ganesh teaches a computing system that includes one or more processors and system memory (Fig. 2, items 204, 206 and 210), the method for causing the computing system to execute a transaction of direct methods in a manner that the effects of the transaction may be at least partially undone even though a custom inversion process was not previously constructed for the transaction (Fig. 5, 8, wherein the customized inversion process is interpreted to include step 810's "apply undo changes to a particular block" analogously shown in Fig. 7, 9, 10, 12), the method comprising the following: creating a mapping (Col. 9, Lines 4-

21, "overwritten in the transaction list...pointer is automatically updated") between each of a plurality of groups of one or more direct (relative term) methods with a corresponding group of one or more inversion methods (Fig. 7A-2, wherein the mapping corresponds to undo data mapped with arrowed lines connecting transaction list to an undo sequence), (Fig. 4 item 432; Fig. 9, items 1008, 1010 and Fig. 11-2, undo block 1102); after creating the mapping (Col. 9, Lines 17-20, "was overwritten... automatically updated to point to rollback entry"), beginning a transaction (Fig. 8, item 800 or Fig. 10, item 1050 or 12, item 1200, wherein the beginning is met by a first execution step); within the transaction, using the mapping and identifying the corresponding group of one or more inversion methods corresponding to the group of one or more direct methods; and recording (Fig. 9, wherein the undo data of items 1008, 1010 and 1012, appear to identify specific changes to make to particular rows to undo a transaction also seen in Fig. 11-2 and Fig. 15) (Fig. 15, wherein the group is interpreted to include containers "Container #A, #B" as illustrated) recording the identity of the corresponding group of one or more inversion methods in a compensation record for the transaction (Fig. 11-2, wherein the compensation record is interpreted to include "undo record 1104-1106" as per "container #722").

However, Ganesh does not expressly teach wherein a direct method is a method undone by a group of one or more of the inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of different transactions.

Brown teaches wherein a direct method is a method undone by a group of one or more of the inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of different transactions (Fig. 4, P. 3, Col. 2, Paragraph 2; P. 4, Col.1, bullets 1-3; P. 5, 8th line from the bottom, "Reusable Object Oriented Software").

Ganesh and Brown are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Ganesh and Brown because it provides for an exploratory model of undo/redo where the user can navigate, visualize, edit and experiment with the history of the system as discussed in Brown, Abstract.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Ganesh and Brown because it provides for an exploratory model of undo/redo where the user can navigate, visualize, edit and experiment with the history of the system as suggested in Brown, Abstract.

Regarding claim 2, Ganesh teaches a method in accordance, wherein the group of one or more direct methods is a first group of one or more transactions and the corresponding group of one or more inversion methods is a first group of one or more inversion methods, the method further comprising the following: running a second group of one or more direct methods as at least part of the transaction, the second group being one of the plurality of groups of one or more direct methods; using the mapping to identify the corresponding second group of one or more inversion methods corresponding to the second group of one or more direct methods; and recording the identity of the corresponding second group of one or more inversion methods in the compensation record. (Fig. 11-2, see container #722)

Regarding claim 3, Ganesh teaches a method in accordance, further comprising the following: committing the transaction. (Fig. 11-1, see slot 0“committed”)

Regarding claim 4, Ganesh teaches a method in accordance, further comprising the following: saving the compensation record to a persistent media upon committing the transaction. (Col. 1, 36-40, wherein the persistent media is interpreted to include a disk)

Regarding claim 5, Ganesh teaches a method in accordance, further comprising the following: determining that the transaction should be compensated; and executing the inversion methods identified in the compensation group corresponding to the transaction. (Fig. 7A-2, see lines connecting transaction to undo)

Regarding claim 6, Ganesh teaches a method in accordance, wherein the transaction is a first transaction and the transaction record is a first transaction record, the method first comprising the following: beginning a second transaction; running a third group of one or more direct methods as at least part of the second transaction, the third group being one of the plurality of groups of one or more direct methods; using the mapping to identify the corresponding third group of one or more inversion methods corresponding to the third group of one or more direct methods; and recording the identity of the corresponding third group of one or more inversion methods in a compensation record for the second transaction. (Fig. 7A-2, Fig. 11; Fig. 15)

Regarding claim 7, Ganesh teaches a method in accordance, further comprising the following: committing the second transaction. (Fig. 7A-2; Fig. 9; Fig. 11; Fig. 15)

Regarding claim 8, Ganesh teaches a method in accordance, wherein the first and second transaction are part of the same larger transaction. (Fig. 7A-2; Fig. 9; Fig. 11; Fig. 15)

Regarding claim 10, Ganesh teaches a method in accordance, further comprising the following: saving the second compensation record to a persistent media. (Fig. 7A-2; Fig. 9; Fig. 11; Fig. 15)

Regarding claim 11, Ganesh does not expressly teach a method in accordance, further comprising the following: receiving a message, wherein beginning the transaction is performed in response to receiving a message. (Col. 6, Lines 55-61)

Regarding claim 14, Ganesh teaches method in accordance, wherein each of the plurality of groups of one or more direct methods each comprise a single method. (Fig. 12, see step 1200; Fig. 7A-2; Fig. 9; Fig. 11; Fig. 12; Fig. 15)

Regarding claim 15, Ganesh teaches a method in accordance, wherein each of the plurality of groups of one or more inverted methods each comprise a single inverted method. (Fig. 12, see step 1210; Fig. 7A-2; Fig. 9; Fig. 11; Fig. 15)

Regarding claim 16, Ganesh teaches a method in accordance, wherein each of the plurality of groups of one or more inverted methods each comprises a single inverted method. (Fig. 12, see step 1210; Fig. 7A-2; Fig. 9; Fig. 11; Fig. 15)

Regarding claim 21, Ganesh teaches a computer program product for use in a computing system that includes one or more processors and system memory (Claim 10, Fig. 2), the computer program product for performing a method for the computing system to execute a transaction of one or more direct (relative term) methods in a manner that the effects of the transaction may be at least partially undone even though a custom inversion process was not previously constructed for the transaction (Fig. 8, items 802, 806, wherein the effect of the transaction is deemed to be partially undone by blocking operation not shown to be previously constructed for the transaction, interpreted to be a negative limitation that is negatively met because as the reference does omit the previous construction), the computer program product comprising one or more computer storage media having thereon computer-executable instructions that (Fig. 2, claim 10), when executed by the one or more processors (Fig. 2), cause the computing system to perform the following: create a mapping between each of a plurality of groups of one or more direct methods with a corresponding group of one or more inversion methods that (Fig. 4, 7A, 7A-2, 9, interpreted to include undo records connected with arrowed lines to transaction records which meet the limitation of a mapping), when executed by the one or more processors of the computing system, cause the computing system to at least partially undo the effects of the execution of the corresponding group of direct methods (Fig. 3, wherein

the direct method corresponds to transaction slots 0, 2 because they are “committed” operation as shown under item 340 in the table with other examples shown in Figs. 4, 7A-1, 7A-2, 9); maintain the mapping between each of the plurality of groups of direct methods with a corresponding group of inversion methods; after creating the mapping, begin a transaction (Fig. 8, item 800 or Fig. 10, item 1050 or 12, item 1200, wherein the beginning is met by a first execution step); run each of a group of one or more direct methods as at least part of the transaction, the group being one of the plurality of groups of one or more direct methods (Fig. 7A-2, wherein the groups correspond to “containers #722, #730”); within the transaction use the mapping to identify the corresponding group of one or more inversion methods corresponding to the group of one or more direct methods (Fig. 4, 7A-2, wherein the direct method is corresponded by following the lined arrows to containerized transactions seen in Fig. 4’s “undo” pointer); and record the identity of the corresponding group of one or more inversion methods in a compensation record for the transaction (Fig. 9, wherein compensation records are met by “undo record” examples 1002, 1004, 1006).

However, Ganesh does not expressly teach wherein a direct method is a method undone by a group of one or more of the inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of different transactions.

Brown as applied above teaches teach wherein a direct method is a method undone by a group of one or more of the inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of different transactions (Fig. 4, P. 4, Vol. 3, paragraph 4).

Regarding claim 22, Ganesh teaches a computer program product in accordance, wherein the group of one or more direct methods is a first group of one or more transactions and the corresponding group of one or more inversion methods is a first group of one or more inversion methods, the computer program product further having thereon computer-executable instructions that, when executed by the one or more processors, further cause the computing system to perform the following (see Claim 10); running a second group of one or more direct methods as at least part of the transaction, run a the second group being one of the plurality of groups of one or more direct methods; use the mapping to identify the corresponding second group of one or more inversion methods corresponding to the second group of one or more direct methods; and record the identity of the corresponding second group of inversion methods in the compensation record. (Fig. 9, Fig. 7A-1, Fig. 7A-2, wherein “inversion method” corresponds to an “undo ptr”)

Regarding claim 23, Ganesh teaches a computer program product in accordance, the computer program product further having thereon computer-executable instructions that, when executed by the one or more processors (see Claim 10), further cause the computing system to perform the following: commit the transaction (Fig. 7, item “committed”).

Regarding claim 24, Ganesh teaches a computer program product in accordance, the computer program product further having thereon computer-executable instructions that, when executed by the one or more processors (see Claim 10), further cause the computing system to

perform the following: save the compensation record to a persistent media upon committing the transaction (Fig. 7, item “committed”; Fig. 2, Col. 1, Lines 35-37).

Regarding claim 25, Ganesh teaches a computer program product in accordance, the computer program product further having thereon computer-executable instructions that, when executed by the one or more processors, further cause the computing system to perform the following: determining that the transaction should be compensated; and executing the inversion methods identified in the compensation group corresponding to the transaction (Fig. 7A-2, Fig. 14B; Fig. 16A-16B, see “undo record” steps).

Regarding claim 26, Ganesh teaches a computer program product in accordance, wherein the transaction is a first transaction and the compensation record is a first compensation record, the computer program product further having thereon computer-executable instructions that, when executed by the one or more processors, further cause the computing system to perform the following: beginning a second transaction; running a third group of direct methods as at least part of the second transaction, the third group being one of the plurality of groups of one or more direct methods; using the mapping to identify the corresponding third group of inversion methods corresponding to the third group of one or more direct methods; and recording the identity of the corresponding third group of one or more inversion methods in a compensation record for the second transaction (Fig. 7A-2, Fig. 14B; Fig. 16A-16B, see “undo record” steps).

Regarding claim 27, Ganesh teaches a computer program product in accordance, the computer program product further having thereon computer-executable instructions that, when executed by the one or more processors, further cause the computing system to perform the following: committing the second transaction. (Fig. 7a-1, Fig. 11-1, see "committed" status field)

Regarding claim 28, Ganesh teaches a computer program product in accordance, wherein the first and second transaction are part of the same larger transaction. (Col. 20, Lines 16-25, interpreted to include "per-block rollback context")

Regarding claim 30, Ganesh teaches a computer program product in accordance, further comprising the following: saving the second compensation record to a persistent media. (Col. 1, 36-40, wherein the persistent media is interpreted to include a disk)

Regarding claim 31, Ganesh teaches a computer program product in accordance, further comprising the following: receiving a message, wherein the act of beginning the transaction is performed in response to receiving the message. (Col. 11, Lines 51-56)

Regarding claim 32, Ganesh teaches a method in accordance 21, wherein each of the plurality of groups of one or more direct methods each comprise a single method. (Fig. 12, see step 1200; Fig. 7A-2; Fig. 9; Fig. 11; Fig. 12; Fig.15)

Regarding claim 33, Ganesh teaches a method in accordance 32, wherein each of the plurality of groups of one or more inverted methods each comprise a single inverted method. (Fig. 12, see step 1200; Fig. 7A-2; Fig. 9; Fig. 11; Fig. 12; Fig.15)

Regarding claim 34, Ganesh teaches a method in accordance 21, wherein each of the plurality of groups of one or more inverted methods each comprises a single inverted method. (Fig. 12, see step 1200; Fig. 7A-2; Fig. 9; Fig. 11; Fig. 12; Fig.15)

Regarding claim 39, Ganesh teaches a computer program product in accordance, wherein the one or more computer storage media are physical memory media (Fig. 2, item 206 or Col. 1, L36-40).

Regarding claim 40, Ganesh teaches a computer program product in accordance, wherein the physical memory media include system memory (Fig. 2, item 206).

Regarding claim 41, Ganesh teaches a computer program product in accordance, wherein the physical memory media include a persistent media (Col. 1, 36-40, wherein the persistent media is interpreted to include a disk).

Claims 9 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesh in view of Brown and further in view of Kumomura.

Regarding claim 9, Ganesh teaches a method in accordance, further comprising the following: determining whether a larger transaction should be compensated; executing the inversion methods identified in the first compensation record; and executing the inversion methods identified in the second compensation group corresponding to the second transaction (Fig. 7A-2; Fig. 9; Fig. 11; Fig.15).

However, Ganesh does not expressly teach corresponding to the first transaction in response to the determining that a larger transaction should be compensated; in response to determining that a larger transaction should be compensated.

Kumomura teaches corresponding to the first transaction in response to the determining that a larger transaction should be compensated; in response to determining that a larger transaction should be compensated (Col. 10, Lines 5-25, “transaction keys for switching to another insurance is set beforehand so that it is larger than the size of the transaction key showing cancellation 175”).

Ganesh in view of Brown and Kumomura are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Ganesh and Kumomura because it provides for cancellation of a payment of a premium transaction as discussed in Kumomura, Abstract.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Ganesh in view of Brown and Kumomura because it provides for cancellation of a payment of a premium transaction as suggested in Kumomura, Abstract.


Regarding claim 29, Ganesh teaches a computer program product in accordance, further comprising the following: determining whether a larger transaction should be compensated; executing the inversion methods identified in the first compensation group corresponding to the first transaction in response determining; and executing the inversion methods identified in the second compensation group corresponding to the second transaction. (Fig. 7A-2, see containers #722, #730)

However, Ganesh does not expressly teach corresponding to the first transaction in response to the determining that a larger transaction should be compensated; in response to determining that a larger transaction should be compensated.

Kumomura as applied above teaches corresponding to the first transaction in response to the determining that a larger transaction should be compensated; in response to determining that a larger transaction should be compensated (Col. 10, Lines 5-25, “transaction keys for switching to another insurance is set beforehand so that it is larger than the size of the transaction key showing cancellation 175”).

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesh in view of Brown in view of Kumomura and in further view of Kesler, (US 7,062,502 B1), hereinafter Kesler.

As to claim 42, Ganesh teaches a method implemented in a computing system that includes one or more processors and system memory (Fig. 2, item 204, “processor”, item 206, “memory”), the method for (mere intended use of) causing the computing system to execute a message-based transaction within a larger transaction (prefaced behind mere intended use

clause), the message-based transaction having one or more methods (Fig. 16A, items 1606, 1610; Fig. 16B, items 1616, 1620, “can the change...be applied”, “apply the undo change”), and in a manner that the effects of the message-based transaction may (optionally not done) be at least partially undone even though a custom inversion process was not previously constructed for the message-based transaction (optionally), the method comprising the following: creating and maintaining a mapping between each of a plurality of groups of one or more direct methods with a corresponding group of one or more inversion methods that (Fig. 16A-B, items 1606, 1610, 1616, 1620), when executed by the one or more processors of the computing system (Fig. 2, items 204, 206, supra), cause the computing system to at least partially undo the effects of the execution of the corresponding group of one or more direct (relative term) methods (Fig. 5, “update transaction information”; Fig. 8, item 806, “is blocking transaction active?”, item 810, “apply undo changes to a particular block”), wherein the mapping includes: a plurality of direct groups, and for each of a plurality of direct groups (Fig. 7A-2; Fig. 11-2, applying an alternate undo record and group is met by a “container”), one or more direct methods executable by the computing system to accomplish at least a part of the message-based transaction; a plurality of inversion groups (Fig. 7A-2, inversion groups are met by “undo” containers 768), and for (intended use) each of the plurality of inversion groups: one or more inversion methods executable by the computing system to at least partially undo effects of at least one of the plurality of direct groups (Fig. 7A-2, undo containers); and a link from each of the plurality of direct groups to a corresponding inversion group (Fig. 7A-2, see , meeting exchange pattern and Fig. 9, “change for row 2”); receiving a message having a message exchange pattern (see double arrows between Fig. 7—2, items 718, 720); after creating and maintaining the

mapping, and in response to receiving the message (Fig. 2, item 202, "bus"), that the mapping is used to automatically generate compensation procedures (Fig. 6, item 604) that when executed by the one or more processors (Fig. 2, item 204, "processor"), cause the computing system to at least partially undo the effects (Fig. 7A-2, "PTR TO NEXT TX UNDO") of the message-based transaction, wherein performing the message-based transaction includes: beginning the message-based transaction by establishing a transaction record (Fig. 9, "undo record"), assigning a transaction record identifier (Fig. 7A-2, "TID 9", transaction ID 9, and creating a compensation record for the transaction, (Fig. 9, "undo data...change for row 2"); executing a first group of direct methods from the plurality of direct groups. and thereby running direct methods as part of the message-based transaction (Fig. 11-2, see "undo block"; Fig. 7A-2, "undo container"); using the mapping, identifying the corresponding group of inversion methods corresponding to the first group of direct methods (Fig. 6, item 602, "locate transaction information of blocking transaction"); and recording the identity of the corresponding group of inversion methods in a compensation record (intended use) for the message-based transaction is associated with a transaction record identifier (see "TID", transaction ID and container to meet the limitation of a group in Fig. 7A2, 11-2, 15); has stored therein an identification of an inversion group identification (Fig. 7A-2, "container #730"; Fig. 15, "Container #A", "Container #B") corresponding to an inversion group in the mapping which inversion group in the mapping when executed at least partially undoes the effects of the message based transaction (Fig. 6, item 604, "undo changes", Fig. 8, "apply undo changes"); in the corresponding inversion group of the mapping; using the compensation record that was automatically generated by compiling a

collection of inversion groups, and by executing the corresponding group of inversion methods together (Fig. 7A-2, 11-2, 15, where “undo container” meets inversion group).

However, Ganesh does not expressly teach where a direct method is a method undone by a group of the one or more of the inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of different transactions.

Brown as applied above teaches “where a direct method is a method undone by a group of the one or more of the inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of inversion methods, and wherein the inversion methods in the mapping are reusable for a plurality of different transactions”.

However, Ganesh does not expressly teach performing at least the message-based transaction within the larger transaction in a manner; wherein the compensation record is included in the message-based transaction that is within the larger transaction; after determining that the larger transaction should be compensated; using additional compensation records in the larger transaction to compensate additional constituent transactions within the larger transaction.

Kumomura teaches performing at least the message-based transaction within the larger transaction in a manner; wherein the compensation record is included in the message-based transaction that is within the larger transaction; after determining that the larger transaction should be compensated; using additional compensation records in the larger transaction to compensate additional constituent transactions within the larger transaction (Col. 10, Lines 5-25,

“transaction keys for switching to another insurance is set beforehand so that it is larger than the size of the transaction key showing cancellation 175”).

Ganesh in view of Brown and Kumomura are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Ganesh in view of Brown and Kumomura because it provides for cancellation of a payment of a premium transaction as discussed in Kumomura, Abstract.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Ganesh and Kumomura because it provides for cancellation of a payment of a premium transaction as suggested in Kumomura, Kumomura, Abstract.

Ganesh merely suggests and one or more parameters whose value should be taken from a direct method of a corresponding direct group to at least partially undo the effects of at least one of the plurality of direct groups (Fig. 9, “TID...9”, transaction ID or row 2 is a parameter).

However, Ganesh and Kumomura do not expressly teach listing one or more parameters for the direct method that should be in the inverted method; and has stored therein one or more specific parameter values corresponding to the one or more parameters; and associated parameter values to compensate the message-based transaction.

Kesler teaches listing one or more parameters for the direct method that should be in the inverted method (Col. 19, Table 8, see “Description”, second column, “parameters may be passed to the SQL statement from the data entry from” adjacent to SQL expression type heading and also under “stored procedure” and “expression”, 4th line above SQL); and associated parameter values to compensate the message-based transaction, (Col. 19, Table 8, Col. 2, “MANAGER_ID”).

Ganesh in view of Kumomura and Kesler are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Ganesh in view of Kumomura and Kesler because it provides for cost savings associated with dynamic SQL and compatibility with commercial middleware products as discussed in Kesler, Col.17, lines 13-14 and 30-35 respectively.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Ganesh in view of Kumomura and Kesler because it provides for cost savings associated with dynamic SQL and compatibility with commercial middleware products as suggested in Kesler, Col. 17, lines 13-14 and 30-35 respectively.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesh in view of Brown in view of Brown, in view of Craig et al., (US 6,757,708 B1), hereinafter Craig .

Regarding claim 12, Ganesh and Kesler do not expressly teach a method in accordance, wherein the message is a HyperText Transport Protocol (HTTP) message.

However, Craig teaches method in accordance 11, wherein the message is a HyperText Transport Protocol (HTTP) message (Col. 3, Lines 40-49).

Ganesh in view of Brown and Craig are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Ganesh in view of Brown and Craig because it provides for applications which typically require state information are internet shopping and e-commerce as discussed in Craig, (Col. 3, Lines 35-45).

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Ganesh in view of Brown and Craig because it provides for applications which typically require state information are internet shopping and e-commerce as discussed in Craig as suggested in Craig, (Col. 3, Lines 35-45).

Claims 13, 17-20, 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesh in view of Kesler, (US 7,062,502 B1), hereinafter Kesler.

Regarding claim 13, Ganesh does not expressly teach the method in accordance, wherein the message is a Simple Object Access Protocol (SOAP) message.

However, Kesler teaches the method in accordance, wherein the message is a Simple Object Access Protocol (SOAP) message. (Col. 38, Lines 5-10)

Ganesh in view of Brown and Kesler are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Ganesh in view of Brown and Kesler because it provides for dynamically generating data entry forms at run-time without writing computer code as discussed in Kesler, Col. 3, Lines 7-8.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Ganesh in view of Brown and Kesler because it provides for dynamically generating data entry forms at run-time without writing computer code as suggested in Kesler, Col. 3, Lines 7-8.

Regarding claim 17, Ganesh teaches a method in accordance, wherein the act of maintaining a mapping comprises the following for at least one of the one or more direct methods in the group of one or more direct methods. (Fig. 4, Fig. 7A-2, Fig. 9)

However, Ganesh does not expressly teach listing one or more parameters for the direct method that should be in the inverted method (Col. 19, Table 8, see “Description”, second column, “parameters may be passed to the SQL statement from the data entry from” adjacent to SQL expression type heading and also under “stored procedure” and “expression”, 4th line above SQL).

Ganesh in view of Brown and Kesler are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Ganesh in view of Brown and Kesler because it provides for cost savings associated with dynamic SQL and compatibility with commercial middleware products as discussed in Kesler, Col.17, lines 13-14 and 30-35 respectively.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Ganesh in view of Brown and Kesler because it provides for cost savings associated with dynamic SQL and compatibility with commercial middleware products as suggested in Kesler, Col. 17, lines 13-14 and 30-35 respectively.

Regarding claim 18, Ganesh does not expressly teach a method in accordance, wherein the act of running a group of one or more direct methods comprises the following: running the direct method using particular values corresponding to the one or more listed parameters.

However, Kesler as applied above teaches a method in accordance, wherein the act of running a group of one or more direct methods comprises the following: running the direct method using particular values corresponding to the one or more listed parameters. (Col. 19, Table 8, see analysis under claim 17)

Regarding claim 19, Ganesh does not expressly teach a method in accordance, further comprising the following: recording values for the one or more listed parameters for the direct method in the compensation record.

However, Kesler as applied above teaches a method in accordance, further comprising the following: recording values for the one or more listed parameters for the direct method in the compensation record. (Col. 19, Table 8, see analysis under claim 17)

Regarding claim 20, Ganesh teaches does not expressly teach a method in accordance, further comprising the following: determining that the transaction should be compensated; and executing the inversion methods identified in the compensation group corresponding to the transaction, wherein the inversion method corresponding to the direct method is executed using the recorded values in the compensation record.

However, Kesler teaches a method in accordance, further comprising the following: determining that the transaction should be compensated; and executing the inversion methods identified in the compensation group corresponding to the transaction, wherein the inversion method corresponding to the direct method is executed using the recorded values in the compensation record (Col. 19, Table 8, see analysis under claim 17).

Regarding claim 35, Ganesh does not expressly teach a method in accordance, wherein the act of maintaining a mapping comprises the following for at least one of the one or more

direct methods in the group of one or more direct methods: listing one or more parameters for the direct method that should be in the inverted method.

However, Kesler teaches a method in accordance, wherein the act of maintaining a mapping comprises the following for at least one of the one or more direct methods in the group of one or more direct methods: listing one or more parameters for the direct method that should be in the inverted method (Col. 19, Table 8, see analysis under claim 17).

Regarding claim 36, Ganesh does not expressly teach a method in accordance, wherein the act of running a group of one or more direct methods comprises the following: running the direct method using particular values corresponding to the one or more listed parameters.

However, Kesler teaches a method in accordance, wherein the act of running a group of one or more direct methods comprises the following: running the direct method using particular values corresponding to the one or more listed parameters (Col. 19, Table 8, see analysis under claim 17).

Regarding claim 37, Ganesh does not expressly teach a method in accordance, further comprising the following: recording values for the one or more listed parameters for the direct method in the compensation record.

However, Kesler teaches a method in accordance, further comprising the following: recording values for the one or more listed parameters for the direct method in the compensation record (Col. 19, Table 8, see analysis under claim 17).

Regarding claim 38, Ganesh does not expressly teach a method in accordance, further comprising the following: determining that the transaction should be compensated; and executing the inversion methods identified in the compensation group corresponding to the transaction, wherein the inversion method corresponding to the direct method is executed using the recorded values in the compensation record.

However, Kesler teaches a method in accordance, further comprising the following: determining that the transaction should be compensated; and executing the inversion methods identified in the compensation group corresponding to the transaction, wherein the inversion method corresponding to the direct method is executed using the recorded values in the compensation record (Col. 19, Table 8, see analysis under claim 17).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Wong whose telephone number is 571-270-1015. The examiner can normally be reached on Mondays through Fridays from 10 AM - 6 PM.

Applicant initiated interviews may be formally requested in advance by faxing a completed PTO-413A form to the Examiner's personal fax number at 571-270-2015. Form PTO-413A is used by the Examiner to prepare for any proposed interview. A detailed agenda listing should be attached including any proposed claim language and/or arguments that will be presented. This form is used to determine whether any proposed interview would advance prosecution and fit within a prescribed time limit.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JDW/
Asst. Examiner, Art Unit 2166
19 June 2009

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